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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/069,372	06/24/2002	Alfonso Maria Bervoets	BERVOETS=2	1381

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WASHINGTON, DC 20001-5303

EXAMINER

SHIMIZU, MATSUICHIRO

ART UNIT	PAPER NUMBER
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2635

DATE MAILED: 07/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/069,372

Applicant(s)

BERVOETS ET AL.

Examiner

Matsuichiro Shimizu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 June 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5 and 7 is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☒ Claim(s) 3,4,6 and 8 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 June 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2</u> . | 6) <input type="checkbox"/> Other: _____  |

### *Claim Objections*

Claims 3,4,6 and 8 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim 3 depends on claims 1 and 2, claims 4, 6 depends on multiple dependent claims and multiple claim 8 depends on multiple claims. See MPEP § 608.01(n). Accordingly, the claims 3,4,6 and 8 have not been further treated on the merits.

### *Specification*

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

"means" and "said," in abstract should be avoided.

### *Claim Rejections – 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by O'Connor et al. (5,648,767).

Regarding claim 1, O'Connor teaches a system for determining the position of a

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transponder (Fig. 4, transponder 30), which transmits a signal and moves along a route with at least a measuring station comprising antenna means for receiving said signal at least at two measuring points (fig. 4, receiver antenna positions 32 and 34) positioned at the two outer points of a line segment which crosses the course in a perpendicular manner, whereby said measuring station comprises: – a first receiver (Fig. 4, a first receiver 32) for receiving said signal through said antenna means at the one measuring point and – a second receiver (Fig. 4, a second receiver 34) for receiving said signal through said antenna means at the other measuring point, – high frequency phase measuring means (col. 3, lines 40–52, phase difference; col. 5, lines 21–26, high frequency requiring intermediate frequency (12.5 MHz)) measuring the phase difference between the output signal of the first receiver and the output signal of the second receiver, – evaluation means (col. 5, lines 35–50, evaluating the crossing of line segment associated alarming loop 24 and clearing loop 28) which, based on the measured phase difference, determines where the transponder passes said line segment (col. 5, lines 35–50, line segment associated alarming loop 24 and clearing loop 28).

***Claim Rejections – 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over O'Connor in view of Ichiyoshi (4,914,735).

Regarding claim 2, O'Connor teaches a system according to claim 1, characterized in that the transponder transmits a modulated signal, that the first receiver is followed by a first demodulator (col. 8, lines 45-65 and lines 57-58; decode the transponder ID) demodulator associated with decoding the transponder id) for demodulating the received signal, that the second receiver is followed by said demodulator for demodulating the received signal via switching circuit (Fig. 6, coax switch 42), and that low frequency phase measuring means (Fig. 6, low frequency phase measuring means associated with combiner 48 and IF) measure the phase difference between the output signal of the first demodulator and the output signal of said demodulator at different time period or switched time. But O'Connor does not teach the transponder transmits a modulated signal, that the first receiver is followed by a first demodulator for demodulating the received signal, that the second receiver is followed by a second demodulator for demodulating the received signal.

However, Ichiyoshi teaches, in the art of communication, the transponder transmits a modulated signal, that the first receiver is followed by a first demodulator for demodulating the received signal, that the second receiver is followed by a second

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demodulator for demodulating the received signal (Fig. 3, col. 4, line 62 to col. 5, line 22, the first and second receivers 132-1 and 132-2 followed by the first and second demodulators 138-1 and 138-2) for purpose of providing time difference between two propagation path. Therefore, it would have been obvious to a person skilled in the art at the time the invention was made to include the transponder transmits a modulated signal, that the first receiver is followed by a first demodulator for demodulating the received signal, that the second receiver is followed by a second demodulator for demodulating the received signal in the device of O'Connor because O'Connor suggests the second receiver followed by the switched first demodulator and Ichiyoshi teaches the transponder transmits a modulated signal, that the first receiver is followed by a first demodulator for demodulating the received signal, that the second receiver is followed by a second demodulator for demodulating the received signal for purpose of providing time difference between two propagation path.

***Allowable Subject Matter***

Claim 5 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claim 5, the prior arts fail to teach or fairly suggest between both ends of said line segment another N measuring points are realized such that the line segment is divided by N+2 measuring points into N+1 segments each having a length which is small enough to realize an unambiguous measurement within said segment, whereby the N+2 measuring points are connected to N+2 receivers, the output of each of said receivers is connected to a field strength measuring means, the output signals

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of all field strength measuring means are evaluated in a comparison circuit, which comparison circuit transfers the output signals of those two receivers having together the largest field strength, to a phase comparator to be mutually compared whereafter the resulting output signal of the phase comparator controls an evaluation unit.

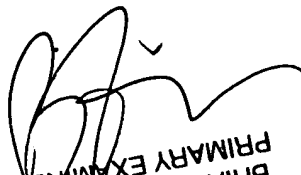
Claims 7 is directly dependent on claim 5, therefore, the prior arts fail to teach or fairly suggest claim 7 for same reason that the prior arts fail to teach or fairly suggest claim 5.

*Contact Information*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matsuichiro Shimizu whose telephone number is (703) 306-5841. The examiner can normally be reached on Monday through Friday from 8:00 AM to 4:30 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik, can be reached on (703-305-4704). The fax phone number for the organization where this application or proceeding is assigned is (703-305-3988).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703-305-8576).

Matsuichiro Shimizu  
June 30, 2004



BRIAN ZIMMERMAN  
PRIMARY EXAMINER